

Tested to operate in the battlefield

arbit

Cross Domain Solutions

RUGGEDIZED DATA DIODE

Unilateral data transfer
between high security networks
without the risk of
unauthorized remote access
or data stealing

Even the most secure connections can be compromised, and even the most well-protected networks can be penetrated.

The fail-safe solution is to physically separate high security networks from low security networks. While this is the most secure solution, this also severely hampers productivity since it prevents data from being transferred between the networks.

However, with the Arbit Data Diode you can allow one-way data transfer without compromising the integrity of the air-gapped network. By using a single fiber-optic connection which can only send light in one direction, the Arbit Data Diode transports data from less-secure networks, such as the open Internet, to secure networks.

While data is allowed to pass one way, it can never be transmitted the opposite way. This means that no intruders can use the connection to remotely access or steal data from your critical network.

- The Arbit Data Diode is a 100% secure physical data diode
- Proven stability through 10 years of service
- User-friendly web interface
- Integrates with Microsoft server solutions
- Quick installation and configuration
- Powerful add-ons to control content moving through the diode
- Full integration with OPSWAT multi anti-malware-scanning including content disarmament and data loss prevention
- 700 mbit/s through-put



TEST

GIGABIT (SSD)

Through-put

700 mbit/s

Transactions per second

18,0 (512 KB files)

Transaction failure rate

0 (out of 5 mio. files)

COMPARE SOFTWARE VS. HARDWARE SOLUTION

| | Firewall | Software Data Diode | Arbit Data Diode |
|------------------------------------|----------|------------------------|---------------------|
| 100% protection against data theft | No | No | Yes |
| 100% protection against hackers | No | No | Yes |
| Secure one-way connection | No | No | Yes |
| Protected by laws of physics | No | No | Yes |

TECHNICAL DESCRIPTION



The Arbit Data Diode is a physical data diode that establishes a physically secure one-way connection with a single fiber-optic cable. The transmission is handled by two dedicated servers.

The sending server is called a pitcher, and the receiving server is called a catcher. No data can be transported from the receiving network to the transmitting network. Therefore, the Arbit Data Diode is just as safe as manual data transfer, yet offers the same convenience as a normal network connection.

The Arbit Data Diode has received the Common Criteria EAL 5+ certification, is listed on NATO IAPC, and meets the ISO-15408 requirements.

FEATURES



- Maximum file size limited only by available disk space
- 64 data channels per diode
- Data channel priority (on transaction basis)
- Supports up to 24 streaming channels (video, radio, etc.)
- Back Pressure in case of critical disk space
- Notifications by email, syslog, and SNMP
- User-friendly web-interface
- No daily maintenance
- Software runs on hardened Linux



SIZE

- Based on 1U, 19"/2 components
- Data diode 1U 2x19"/2 units



WORKING CLIMATE / TESTED ENVIRONMENTS

- Temperature shock
- Salt/fog
- Vibration
- EMC/EMI Environment



POWER

- Data Diode will run on 12-24 V
- Diode < 170 W



SECURITY CERTIFICATION

The Target of Evaluation (TOE) ensures NO backflow is possible.

SUPPORTED PROTOCOLS



- Mail (SMTP)
- Simple File Transfer (FTP, SFTP)
- Windows share forwarding (SMB)
- Windows share mirroring (SMB)
- Network File System share forwarding (NFS)
- Network File System share mirroring (NFS)
- Time synchronization (NTP)
- Streaming (TCP, UDP)
- REST API Forwarder (HTTP, HTTPS)

REFERENCE CUSTOMERS

Arbit Data Diode and Arbit TRUST Gateway

KONGSBERG Norway www.kongsberg.com

The Agency for Governmental IT Services www.statens-it.dk/english

Arbit RUGGEDIZED C41STAR Gateway

Danish Ministry of Defence Acquisition and Logistics Organisation www.fmi.dk/eng

ABOUT

Founded in 2006, Arbit specializes in cybersecurity solutions for organizations requiring the highest security. Arbit's solutions are deployed in top security networks throughout the world, including military organizations, police, and intelligence services.

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